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Re: **GN Docket No. 09-191 and WC Docket No. 07-52**

September 15, 2010

Julius Genachowski
Chairman, Federal Communications Commission
445 12th Street, S.W.
Washington D.C. 20554

Dear Chairman Genachowski,

I am writing in response to your September 1, 2010, Notice of Inquiry into two under-developed issues in the open internet proceeding. As Principal Librarian for Special Projects at Carnegie Mellon University, my primary concern is how proposed legislation or regulations regarding network neutrality will impact higher education and access to knowledge. I am concerned about the integrity of the Internet, the diversity and pricing of its offerings, and its future as a vehicle of free speech and innovation.

Concerns about specialized services provided over the same last-mile facilities as broadband Internet access services

Future innovations will include, and perhaps be dominated by, services distinguishable in purpose and scope from broadband Internet access service, but that use broadband Internet access to accomplish their goals. To *not* apply network neutrality to these specialized services would render the notion of network neutrality useless by enabling Internet Service Providers (ISPs) to enhance or prioritize specialized service delivery to subscribers based on the vendor's willingness to pay.

Vendor-driven prioritization (a.k.a. "paid prioritization"¹) is significantly different from user-driven prioritization.

- User-driven prioritization is acceptable because it prioritizes traffic on the end user's last-mile connection based on payments and designations made to the ISP by the user. For example, the user chooses to pay more to get faster service delivery.
- Vendor-driven prioritization is objectionable because it prioritizes traffic on the end user's last-mile connection based on payments and designations made to the ISP by the specialized service provider (vendor). The user has no choice in the matter.

Allowing specialized services to operate in defiance of network neutrality principles will fracture the Internet by enabling ISPs to

¹ See the comment submitted by the Center for Democracy and Technology dated September 8, 2010, available at <http://fjallfoss.fcc.gov/ecfs/comment/view?id=6016054019>.

- Favor their own content and services or those of their business partners
- Discriminate against content and services provided by competitors

Enabling discrimination among specialized services based on vendor-driven (paid) prioritization will create a two-tiered Internet, with a fast lane for companies willing and able to pay more and a slow lane for everyone else. Vendor-driven prioritization will threaten innovation by making it difficult for new players to compete. Meanwhile users will pay higher prices for these services.

Phone and cable companies want specialized services to be exempt from network neutrality rules so that they can charge users premium prices for these services. They argue that rules that prohibit premium pricing will discourage them from continuing to invest in the infrastructure needed for service delivery. This is obfuscation and greed talking. They want an un-level playing field and the freedom to price gouge. For innovation to flourish there must be a level playing field where competition keeps prices in check. Companies should be free to engage in user-driven prioritization, not vendor-driven (paid) prioritization.

Concerns about network neutrality provisions for mobile wireless Internet access services

Network neutrality principles must apply to mobile wireless Internet access as well as to wired access. The future of the Internet is wireless. Granted the spectrum is limited and wireless networks are not yet comparable to wireline networks. This constrains what services can be provided and perhaps the quality of the services, but is not a sufficient reason to exempt wireless services from network neutrality principles. With net neutrality, all service providers operate on a level playing field. Without it, the playing field is not level and innovators and users suffer. Without it, ISPs will be able to favor their own or their business partners' content and services and to discriminate against competitors. Again, user-driven change is not a problem. For example, business models that require users to pay based on the amount of data or bandwidth they use are acceptable. When I want more potato chips, I pay to purchase more. It's my choice.

In an academic community, students and faculty need to know when they work online – either on the wire or wireless – that the resources they encounter have not been tampered with by their ISP, not prioritized to maximize revenue or selected based on business, religious or political affiliation. Students and faculty work at home, on campus, and in coffee shops, bookstores, and hotels around the world – places served by a variety of ISPs, sometimes wired and sometimes (increasingly) wireless. Their experience of moving from the wire to wireless and back again should be transparent. Search results in one venue should not be strikingly different from search results in the other. A Ph.D. candidate doing the background literature search for his dissertation should not have to worry about whether his ISP has denigrated information that its shareholders dislike. Similarly, a parent with a sick child should not have to worry about whether a pharmaceutical company paid the ISP to have its information delivered upfront and center.

“Mobile learning” is a new buzzword in higher education. Applications are being developed for this burgeoning market. Many technological innovations are developed on university campuses and spun off as start-up companies. The research funding that yields these

innovations is paid in large part by taxpayers, through federal grants. The taxpayers and the government want a good return on their investment. To achieve this, the Internet must remain neutral. A level playing field is essential to foster innovation and healthy competition. A level playing field is essential to provide equitable access to information.

Conclusions

The core of network neutrality is consumer choice and non-discriminatory treatment of Internet content and services. Allowing discrimination on the Internet will be the death knell for equitable access to information and the integrity of online research and education. If service delivery becomes fractured – if what is delivered on the wire is different from what is delivered on wireless, if one ISP becomes the Fox News of the Internet, another the CNN, etc. – the implications are dire. Discrimination will stifle innovation, raise prices, and increase the digital divide between the haves and the have nots. Many traditionally underserved regions and demographic groups turn to mobile devices for Internet access because they are more affordable than computers. Do they not deserve an affordable and neutral Internet?

We cannot have two tiers on the Internet. Certainly if the line is drawn – either between specialized and traditional services or between wired and wireless access – big business will invest in the non-neutral arena because that will be the biggest revenue generator, the cyberspace of premium pricing. The neutral Internet will wither and perhaps disappear for lack of investment. We dare not provide a free (affordable), slow and impoverished Internet for the public (a.k.a., the have nots, the masses, the poor) and an expensive, fast and abundant Internet for the have's (the elite, the wealthy). At the feet of the statue of liberty is the inscription: "Give us your tired, your poor, your hungry." The choice about network neutrality may well be the choice about whether we welcome or disenfranchise many Americans, with ramifications that reverberate through generations.

In her new book, *Internet Architecture and Innovation*, Barbara van Schewick describes how the original, open end-to-end (neutral) architecture of the Internet fostered innovation and how deviating from this design principle will reduce innovation, limit what users can do, and threaten the Internet's ability to realize its economic, social, cultural and political potential. Telephone and cable companies are lobbying to take control of the Internet. Allowing discrimination on the network – among service types or access types, rather than mandating network neutrality, will benefit their financial bottom line, but it will not benefit users or serve the public good. Schewick warns that government intervention may be necessary to save the social benefits derived from the original Internet design principle. Take heed.

Please just say no to any attempt to exempt Internet activity from the principles of network neutrality end-to-end.

Thank you for your time.

Sincerely,



Denise Troll Covey